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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/723,585	11/28/2000	Alexander J. Dyakonov	4800-090	8519

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EXAMINER

LOPEZ, CARLOS N

ART UNIT	PAPER NUMBER
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1731

5

DATE MAILED: 01/08/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/723,585	Applicant(s) DYAKONOV ET AL.	
	Examiner Carlos Lopez	Art Unit 1731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
- 4a) Of the above claim(s) 4-21 and 41-45 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 22-40, 46 and 47 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____   |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>2</u> | 6) <input type="checkbox"/> Other:  |

## DETAILED ACTION

### *Election/Restrictions*

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-3, 22-40, and 46-47, drawn to smoking article, classified in class 131, subclass 360.
- II. Claims 4-21, drawn to carbon monoxide pump, classified in class 131, subclass 200.
- III. Claim 41-45, drawn to method of removing carbon monoxide from a smoking article, classified in class 131, subclass 331.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and III are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the process for using the product as claimed can be practiced with another materially different product such as benzoquinone impregnated sheets.

Inventions I and II are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2)

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that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the subcombination requires a catalyst. The subcombination has separate utility such as filter for an air-mask.

Inventions II and III are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the process for using the product as claimed can be practiced with another materially different product such as benzoquinone impregnated sheets.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Because these inventions are distinct for the reasons given above and the search required for Groups I, II, and III are not coextensive, restriction for examination purposes as indicated is proper.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

During a telephone conversation with Howard A. Maccord, on 12/21/01 a provisional election was made with traverse to prosecute the invention of Group I,

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claims 1-3, 22-40, and 46-47. Affirmation of this election must be made by applicant in replying to this Office action. Claims 4-21, and 41-45 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- 1) Claims 1-3, 22-40, 46 and 47 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

At lines 6-7 of claim 1, it is unclear the position of the CO pump in relation to the tobacco column.

In claim 22 it is unclear the position of the CO pump and absorbent in relation to the tobacco column. Nor is it clear on what are the venting holes formed on.

In claims 28-30, it is unclear where the additional filter is located.

In claims 32 and 33, it is unclear what structural limitation is intended by reciting functional language.

In claims 46 and 47 it is unclear the position of the CO pump in relation to the fitting.

Claims 24,25, 34,35 and 39 are considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired.

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In claim 24, there are pluralities of metals that are capable and incapable of converting CO to CO<sub>2</sub>.

In claim 25, there are pluralities of rare earth metals that are capable and incapable of converting CO to CO<sub>2</sub>.

In claims 34, 35, and 39 there are an infinite number of zeolite and oxides.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2) Claims 1-3 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Dale et al (US 4,317,460). Dale discloses catalyst for the oxidation of CO to CO<sub>2</sub> for use in a filter of a smoking product

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(Column 6, lines 57-68). A smoking product as defined by Dale may be a cigarette as disclosed in Column 1, line 4. Dale's catalyst system comprises of a metal component belonging to Groups 6-8 of the periodic table (Column 4, lines 15-50) with a support structure (absorbent) made of a zeolite or alumina (amorphous oxide) (Bridging paragraph of Columns 4 and 5). Dale additionally teaches that the claimed CO pump may be used in the triple filters for smoking products (such as a cigarette as disclosed in Column 1, line 4), wherein the middle portion contains the catalyst system or the catalyst system may be part of the whole cigarette filter (Column 6, lines 57-68). Dale is silent disclosing a cigarette having a tobacco column enveloped by a wrapper. However, it is expected that conventional cigarettes comprise of a tobacco column having a wrapper enveloping the tobacco column. Claims 1-3 are anticipated or at the least obvious over Dale et al who teaches a catalyst system for a cigarette filter.

3) Claims 1-3, 22-40, 46 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dale et al (US 4,317,460) in view of Wahle et al (US 4,301,816). As disclosed above Dale discloses the claimed CO pump for a cigarette. Dale is silent disclosing venting holes on the CO pump (filter). However, Wahle teaches of providing venting holes adjacent the filter of a cigarette in order to decrease the percentage of nicotine and tar inhaled by the smoker (Column 1, Lines 35-40). At the time the invention was made it would have been obvious to a person of ordinary skill in the art to use venting holes on Dale's cigarette filter in order to reduce inhaled tar and nicotine.

As for claim 28, Examiner takes official notice that it is well known cellulose acetate has been used as filter material for cigarettes.

As for claims 46 and 47, the claimed fitting is the tipping paper present in conventional cigarettes in order to join the filter element to the tobacco rod element of a filter cigarette.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carlos Lopez whose telephone number is (703) 605-1174. The examiner can normally be reached on 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Silverman Stanley can be reached on (703) 308-3837. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7718 for regular communications and (703) 305-3599 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0651.

C.L  
January 3, 2002

*Jose Fortuna*  
**JOSE FORTUNA**  
**PATENT EXAMINER**